Claims:

1. A contact lens for myopia, the contact lens comprising an inner optic zone with a diameter of between 1 mm and 4 mm, a transition zone and an outer optic zone surrounding the transition zone, the outer optic zone having at least a portion immediately adjacent said transition zone with negative power, wherein the inner optic zone has an add power portion with a substantially constant add power relative to the negative power of between 0.5 diopters and 4 diopters inclusive, and wherein the transition zone occupies a radial distance of 0.5 mm or less.

2. The contact lens of claim 1, wherein the inner optic zone has a diameter between 2 mm and 4 mm.

3. The contact lens of claim 1, wherein the inner optic zone has a diameter of less than 2 mm.

4. The corneal contact lens of any one of claims 1 to 3, wherein the outer optic zone includes at least a portion with a third power, relatively more positive than the negative power, wherein the portion with a third power is distinct from the inner optic zone.

5. The corneal contact lens of claim 4, wherein the third power is substantially equal to the power in the add power portion.

6. The corneal contact lens of claim 4, wherein the third power is different to the power in the add power portion.

7. The corneal contact lens of claim 6, wherein the third power is greater than the power in the add power portion.

8. The corneal contact lens of any one of claims 1 to 7, wherein the outer optic zone includes at least two portions with power greater than the power in the add power portion, separated by a portion with the first power.

9. The corneal contact lens of claim 8, wherein each of said at least two portions have the same power.

10. The corneal contact lens of claim 8, wherein each of said at least two portions have different powers.

11. The corneal contact lens of claim 10, wherein the portion with more positive power is located on the contact lens at a greater radial distance than the portion with a lesser power.

12. A contact lens for myopia, the contact lens comprising an inner optic zone and an outer optic zone immediately surrounding the inner optic zone, the outer optic zone having at least a portion with negative power and the inner optic zone including a central portion with an add power relative to the negative power of between 1.5 diopters and 4 diopters inclusive, wherein the inner optic zone has a diameter of between 1 and 4 mm.

13. The contact lens of claim 12 wherein the add power of the inner optic zone progressively reduces with an increase in diameter and wherein the power profile of the inner optic zone equals the power of the outer optic zone at the intersection of the inner optic zone with the outer optic zone.

14. The contact lens of claim 12 or claim 13 wherein the outer optic zone has a substantially constant negative power with radius.

15. The contact lens of any one of claims 12 to 14 wherein the central portion has an add power relative to the negative power of between 2.6 diopters and 4 diopters inclusive.

16. A method of treating myopia, the method comprising:

providing a corneal contact lens with an outer optic zone having a negative power designed to correct for the refractive error of the eye for the distance and an inner optic zone having a relatively positive power in comparison to the outer optic zone; and

selecting the diameter of the inner optic zone to control the progression of myopia while still maintaining acceptable distance vision.

17. A method of treating myopia, the method comprising:

providing a corneal contact lens that includes within an optic zone one or more first portions with a power designed to correct distance vision and

one or more second portions with relatively positive power in comparison to the one or more first portions; and

selecting the proportion of the one or more first portions relative to the one or more second portions so as to control the progression of myopia while still maintaining acceptable distance vision.

18. The method of claim 17 comprising selecting the power of at least one of the one or more second portions so as to control the progression of myopia.

19. The method of claim 17 or claim 18 comprising selecting the power of at least one of the second portions to correct lag of accommodation in the eye with myopia.

20. The method of claim 19, wherein at least two second portions have power selected to correct the lag of accommodation.

21. The method of claim 19 or claim 20, wherein at least one second portion has a power greater than that required to correct the lag of accommodation.

22. The method of any one of claims 17 to 21, wherein at least one second portion has a power designed to bring to focus images at the peripheral retina on or in front of the retina.

23. The method of any one of claims 17 to 21, wherein at least one second portion has a power designed to bring to focus images at the peripheral retina closer to the retina.

24. A method of treating myopia in an eye with lag of accommodation, the method comprising providing a lens with an inner optic zone and an outer optic zone, the inner optic zone correcting for the lag accommodation and the outer optic zone correcting distance vision.

25. The method of claim 24, wherein the inner optic zone is selected to be approximately the same diameter as the pupil of the eye when viewing near objects.

26. The method of claim 24, wherein the diameter of the inner optic zone is selected to be less than diameter of the pupil of the eye to which it is to be applied when viewing near objects.

27. The method of claim 24, wherein the diameter of the inner optic zone is selected to be greater than diameter of the pupil of the eye to which it is to be applied when viewing near objects.

28. The method of any one of claims 24 to 27, wherein the outer optic zone has a substantially constant negative power across its entire radius.

29. The method of any one of claims 24 to 28, wherein the outer optic zone includes a plurality of sub-zones, wherein a first sub-zone has a power selected to correct distance vision and a second sub-zone has positive power relative to the first sub-zone.

30. The method of claim 29, wherein the second sub-zone is designed so that images at the peripheral retina are brought to a focus one of closer to, on, or in front of the retina.

31. A contact lens for treating an eye with myopia, the contact lens comprising an optic zone including an inner optic zone and an outer optic zone, the outer optic zone including at least a portion with a first power, that acts to correct distance vision of the eye and the inner optic zone including at least a portion with a second power, relatively positive than the first power, wherein the inner optic zone comprises a meridian extending across the optic zone.

32. A contact lens for treating an eye with myopia, the contact lens comprising an optic zone including an inner optic zone and an outer optic zone, the outer optic zone including at least a portion with a first power, that acts to correct distance vision of the eye and the inner optic zone including at least a portion with a second power, relatively positive than the first power, wherein the inner optic zone is located off-set from the centre of the contact lens and wherein the corneal contact lens structured to adopt a particular orientation when fitted to the eye so that the inner optic zone is located off-set from the centre in the nasal direction.

CLAIMS:

1. A contact lens for myopia, the contact lens comprising an inner lag reduction optic zone with a diameter in the range of 1 to 2 mm, a transition zone and an outer myopia correction optic zone surrounding the transition zone, the outer myopia correction optic zone having at least a portion immediately adjacent said transition zone with negative power that corrects myopia of the eye of a wearer, wherein the inner lag reduction optic zone is such as to reduce or eliminate lag of accommodation by said eye when viewing at near distances, said inner lag reduction optic zone having an add power portion with a substantially constant add power relative to the said negative power of between 0.5 diopters and 4 diopters inclusive, and wherein the transition zone occupies a radial distance of 0.5 mm or less.

2. The contact lens of claim 1, wherein the outer myopia correction optic zone includes at least a portion with a third power, relatively more positive than said negative power, wherein the portion with a third power is distinct from the inner lag reduction optic zone.

3. The contact lens of claim 2, wherein the third power is substantially equal to the power in the add power portion.

4. The contact lens of claim 2, wherein the third power is different to the power in the add power portion.

5. The contact lens of claim 4, wherein the third power is greater than the power in the add power portion.

6. The contact lens of claim 1, wherein the outer myopia correction optic zone includes at least two portions with power greater than the power in the add power portion, separated by a portion with the first power.

7. The contact lens of claim 6, wherein each of said at least two portions have the same power.

8. The contact lens of claim 6, wherein each of said at least two portions have different powers.

9. The contact lens of claim 8, wherein the portion with more positive power is located on the contact lens at a greater radial distance than the portion with a lesser power.

10. A contact lens for myopia, the contact lens comprising an inner lag reduction optic zone and an outer myopia correction optic zone immediately surrounding the inner lag reduction optic zone, the outer myopia correction optic zone having at least a portion with negative power and the inner lag reduction optic zone is such as to reduce or eliminate lag of accommodation by said eye when viewing at near distances, said inner lag reduction optic zone including a central portion with an add power relative to said negative power of between 1.5 diopters and 4 diopters inclusive, wherein the inner lag reduction optic zone has a diameter of between 1 and 4 mm, and wherein the add power of the inner lag reduction optic zone progressively reduces with an increase in diameter and wherein the power profile

of the inner lag reduction optic zone equals the power of the outer myopia correction optic zone at the intersection of the inner lag reduction optic zone with the outer myopia correction optic zone.

11. The contact lens of claim 10 wherein the outer myopia correction optic zone has a substantially constant negative power with radius.

12. The contact lens of claim 10 wherein the central portion has an add power relative to the negative power of between 2.6 diopters and 4 diopters inclusive.

13. A contact lens for myopia, the contact lens comprising an inner lag reduction optic zone and an outer myopia correction optic zone immediately surrounding the inner lag reduction optic zone, the outer myopia correction optic zone having at least a portion with negative power and having a substantially constant negative power with radius, and the inner lag reduction optic zone is such as to reduce or eliminate lag of accommodation by said eye when viewing at near distances, said inner lag reduction optic zone including a central portion with an add power relative to said negative power of between 1.5 diopters and 4 diopters inclusive, wherein the inner lag reduction optic zone has a diameter of between 1 and 4 mm.

14. A contact lens for myopia, the contact lens comprising an inner lag reduction optic zone and an outer myopia correction optic zone immediately surrounding the inner lag reduction optic zone, the outer myopia correction optic zone having at least a portion with negative power and the inner lag reduction optic zone is such as to reduce or eliminate lag of accommodation by said eye when viewing at near distances, said inner lag reduction optic zone including a central portion with an add power relative to said negative power of between 1.5 diopters and 4 diopters inclusive, wherein the inner lag reduction optic zone has a diameter of between 1 and 4 mm, and wherein the central portion has an add power relative to the negative power of between 2.6 diopters and 4 diopters inclusive.

15. A contact lens for treating an eye with myopia, the contact lens comprising an optic zone including an inner optic zone and an outer optic zone, the outer optic zone including at least a portion with a first power, that acts to correct distance vision of the eye and the inner optic zone including at least a portion with a second power, relatively positive than the first power, wherein the inner optic zone comprises a meridian extending across the optic zone.